# Contents to volume 240

## Research Letters

Hydrogen evolution by subchloroplast preparations of photosystem II from pea and spinach (FEB 06493) *S.V. Mal'tsev, S.I. Allakhverdiev, V.V. Klimov, A.A. Krasnovsky* 1

COOH-terminal residues of D1 and the 44 kDa CPa-2 at spinach photosystem II core complex (FEB 06485) *M. Takahashi, T. Shiraishi, K. Asada* 6

Reconstitution of the photosystem I complex from the P700 and $F_X$-containing reaction center core protein and the $F_A/F_B$ polypeptide (FEB 06496) *J.H. Golbeck, T. Mehari, K. Parrett, I. Ikegami* 9

Amino acid sequences of ribosomal proteins S11 from *Bacillus stearothermophilus* and S19 from *Halobacterium marismortui*: Comparison of the ribosomal protein S11 family (FEB 06491) *M. Kimura, J. Kimura, T. Hatakeyama* 15

The primary structures of ribosomal proteins L16, L23 and L33 from the archaebacterium *Halobacterium marismortui* (FEB 06492) *T. Hatakeyama, T. Hatakeyama, M. Kimura* 21

The tertiary structure of *Aspergillus saitoi* minor ribonuclease (Ms) predicted from the structure of RNase $T_1$ (FEB 06500) *R. Flögel, P. Zielenkiewicz, W. Saenger* 29

Conserved and variable elements in RNA genomes of potexviruses (FEB 06494) *K.G. Skryabin, S.Yu. Morozov, A.S. Kraev, M.N. Rozanov, B.K. Chernov, L.I. Lukasheva, J.G. Atabekov* 33

Occurrence and spacing of ribosome recognition sites in mRNAs of chloroplasts from higher plants (FEB 06481) *M. Ruf, H. Kössel* 41

Nucleotide sequence of a cDNA for the dihydrolipoamide acetyltransferase component of human pyruvate dehydrogenase complex (FEB 06495) *T.J. Thekkumkara, L. Ho, I.D. Wexler, G. Pons, T.-C. Liu, M.S. Patel* 45

Production of a truncated human c-*myc* protein which binds to DNA (FEB 06497) *T. Naoe, H. Shiku, K. Yamada, T. Okazaki, Y. Kurosawa* 49

ATP stimulates the uptake of *S*-dinitrophenylglutathione by rat liver plasma membrane vesicles (FEB 06498) *K. Kobayashi, Y. Sogame, K. Hayashi, P. Nicotera, S. Orrenius* 55

Mechanical stimulation induces $Ca_i^{2+}$ transients and membrane depolarization in cultured endothelial cells: Effects on $Ca_i^{2+}$ in co-perfused smooth muscle cells (FEB 06499) *M.S. Goligorsky* 59

The $\beta$-bungarotoxin-binding protein from chick brain; binding sites for different neuronal $K^+$ channel ligands co-fractionate upon partial purification (FEB 06480) *R.R. Schmidt, H. Betz* 65

Fractionation of synaptophysin-containing vesicles from rat brain and cultured PC12 pheochromocytoma cells (FEB 06487) *B. Wiedenmann, H. Rehm, M. Knierim, C.-M. Becker* 71

Plasmalogen content and distribution in the sarcolemma of cultured neonatal rat myocytes (FEB 06506) *J.A. Post, A.J. Verkleij, B. Roelofsen, J.A.F. Op de Kamp* 78

Hemispheric asymmetry of rapid chloride responses to inositol trisphosphate and calcium in *Xenopus* oocytes (FEB 06503) *M. Lupu-Meiri, H. Shapira, Y. Oron* 83

Intracellular calcium release mediated by two muscarinic receptor subtypes (FEB 06514) *E. Neher, A. Marty, K. Fukuda, T. Kubo, S. Numa* 88

Different sensitivities to agonist of muscarinic acetylcholine receptor subtypes (FEB 06515) *H. Bujo, J. Nakai, T. Kubo, K. Fukuda, I. Akiba, A. Maeda, M. Mishina, S. Numa* 95

Regulation of the choline, ethanolamine and serine base exchange enzyme activities of rat brain microsomes by phosphorylation and dephosphorylation (FEB 06509) *J.N. Kanfer, D. McCartney, H. Hattori* 101

Ion-conducting channels in a Gram-positive bacterium (FEB 06517) *M. Zoratti, V. Petronilli* 105

*Published by Elsevier Science Publishers B.V. (Biomedical Division)*



00145793/88/$3.50 © 1988 Federation of European Biochemical Societies

# Contents to volume 240

## Research Letters

Hydrogen evolution by subchloroplast preparations of photosystem II from pea and spinach (FEB 06493) *S.V. Mal'tsev, S.I. Allakhverdiev, V.V. Klimov, A.A. Krasnovsky* 1

COOH-terminal residues of D1 and the 44 kDa CPa-2 at spinach photosystem II core complex (FEB 06485) *M. Takahashi, T. Shiraishi, K. Asada* 6

Reconstitution of the photosystem I complex from the P700 and $F_X$-containing reaction center core protein and the $F_A/F_B$ polypeptide (FEB 06496) *J.H. Golbeck, T. Mehari, K. Parrett, I. Ikegami* 9

Amino acid sequences of ribosomal proteins S11 from *Bacillus stearothermophilus* and S19 from *Halobacterium marismortui*: Comparison of the ribosomal protein S11 family (FEB 06491) *M. Kimura, J. Kimura, T. Hatakeyama* 15

The primary structures of ribosomal proteins L16, L23 and L33 from the archaebacterium *Halobacterium marismortui* (FEB 06492) *T. Hatakeyama, T. Hatakeyama, M. Kimura* 21

The tertiary structure of *Aspergillus saitoi* minor ribonuclease (Ms) predicted from the structure of RNase $T_1$ (FEB 06500) *R. Flögel, P. Zielenkiewicz, W. Saenger* 29

Conserved and variable elements in RNA genomes of potexviruses (FEB 06494) *K.G. Skryabin, S.Yu. Morozov, A.S. Kraev, M.N. Rozanov, B.K. Chernov, L.I. Lukasheva, J.G. Atabekov* 33

Occurrence and spacing of ribosome recognition sites in mRNAs of chloroplasts from higher plants (FEB 06481) *M. Ruf, H. Kössel* 41

Nucleotide sequence of a cDNA for the dihydrolipoamide acetyltransferase component of human pyruvate dehydrogenase complex (FEB 06495) *T.J. Thekkumkara, L. Ho, I.D. Wexler, G. Pons, T.-C. Liu, M.S. Patel* 45

Production of a truncated human c-*myc* protein which binds to DNA (FEB 06497) *T. Naoe, H. Shiku, K. Yamada, T. Okazaki, Y. Kurosawa* 49

ATP stimulates the uptake of *S*-dinitrophenylglutathione by rat liver plasma membrane vesicles (FEB 06498) *K. Kobayashi, Y. Sogame, K. Hayashi, P. Nicotera, S. Orrenius* 55

Mechanical stimulation induces $Ca_i^{2+}$ transients and membrane depolarization in cultured endothelial cells: Effects on $Ca_i^{2+}$ in co-perfused smooth muscle cells (FEB 06499) *M.S. Goligorsky* 59

The $\beta$-bungarotoxin-binding protein from chick brain; binding sites for different neuronal $K^+$ channel ligands co-fractionate upon partial purification (FEB 06480) *R.R. Schmidt, H. Betz* 65

Fractionation of synaptophysin-containing vesicles from rat brain and cultured PC12 pheochromocytoma cells (FEB 06487) *B. Wiedenmann, H. Rehm, M. Knierim, C.-M. Becker* 71

Plasmalogen content and distribution in the sarcolemma of cultured neonatal rat myocytes (FEB 06506) *J.A. Post, A.J. Verkleij, B. Roelofsen, J.A.F. Op de Kamp* 78

Hemispheric asymmetry of rapid chloride responses to inositol trisphosphate and calcium in *Xenopus* oocytes (FEB 06503) *M. Lupu-Meiri, H. Shapira, Y. Oron* 83

Intracellular calcium release mediated by two muscarinic receptor subtypes (FEB 06514) *E. Neher, A. Marty, K. Fukuda, T. Kubo, S. Numa* 88

Different sensitivities to agonist of muscarinic acetylcholine receptor subtypes (FEB 06515) *H. Bujo, J. Nakai, T. Kubo, K. Fukuda, I. Akiba, A. Maeda, M. Mishina, S. Numa* 95

Regulation of the choline, ethanolamine and serine base exchange enzyme activities of rat brain microsomes by phosphorylation and dephosphorylation (FEB 06509) *J.N. Kanfer, D. McCartney, H. Hattori* 101

Ion-conducting channels in a Gram-positive bacterium (FEB 06517) *M. Zoratti, V. Petronilli* 105

*Published by Elsevier Science Publishers B.V. (Biomedical Division)*



00145793/88/$3.50 © 1988 Federation of European Biochemical Societies

Light-regulated expression of the *psbA* transcript in the cyanobacterium *Anacystis nidulans* (FEB 06512) *A. Lönneborg, S.R. Kalla, G. Samuelsson, P. Gustafsson, G. Öquist* 110

Immunogenic protein MPB57 from *Mycobacterium bovis* BCG: molecular cloning, nucleotide sequence and expression (FEB 06511) *R. Yamaguchi, K. Matsuo, A. Yamazaki, S. Nagai, K. Terasaka, T. Yamada* 115

β-Adrenergic regulation of c-fos gene expression in an epithelial cell line (FEB 06415) *C.-K. Yeh, J.M. Louis, E.E. Kousvelari* 118

The human lactase-phlorizin hydrolase gene is located on chromosome 2 (FEB 06501) *T.A. Kruse, L. Bolund, K.-H. Grzeschik, H.H. Ropers, H. Sjöström, O. Norén, N. Mantei, G. Semenza* 123

Human heart cytochrome *c* oxidase subunit VIII: Purification and determination of the complete amino acid sequence (FEB 06490) *A.B.P. Van Kuilenburg, A.O. Muijsers, H. Demol, H.L. Dekker, J.J. Van Beeumen* 127

Electron microscopy of glycogen degrading enzymes (FEB 06518) *D.G. Scraba, R.D. Bradley, P.M.D. Fitzgerald, N.B. Madsen* 133

Crystallization and preliminary X-ray diffraction studies of intact EF-Tu from *Thermus aquaticus* YT-1 (FEB 06504) *C. Lippmann, C. Betzel, Z. Dauter, K. Wilson, V.A. Erdmann* 139

Reconstitution of plastoquinone in the D1/D2/cytochrome *b*-559 photosystem II reaction centre complex (FEB 06507) *K. Gounaris, D.J. Chapman, J. Barber* 143

Proteoliposomes with right-side-out oriented purple membrane/bacteriorhodopsin require cations inside for proton pumping (FEB 06502) *K. Ihara, Y. Mukohata* 148

Analysis of the electron transfer from $Pheo^-$ to $Q_A$ in PS II membrane fragments from spinach by time resolved 325 nm absorption changes in the picosecond domain (FEB 06513) *H.-J. Eckert, N. Wiese, J. Bernarding, H.-J. Eichler, G. Renger* 153

Luminescent $Ag_{12}$-metallothionein: dependence of emission intensity on silver-thiolate cluster formation (FEB 06516) *M.J. Stillman, A.J. Zelazowski, Z. Gasyna* 159

Stereospecific bioactions of 5-hydroxyicosatetraenoate (FEB 06510) *A.G. Rossi, M.J. Thomas, J.T. O'Flaherty* 163

Inhibition by amiloride and by $Na^+$-depletion of A23187-stimulated arachidonic acid and histamine release from rat mast cells (FEB 06521) *H. Linnebjerg, H.S. Hansen, B. Jensen* 167

Generation of phosphatidylinositol 4,5-bisphosphate proceeds through an intracellular route in rat hepatocytes (FEB 06522) *G.A. Lundberg, B. Jergil* 171

S-100b protein regulates the activity of skeletal muscle adenylate cyclase in vitro (FEB 06529) *G. Fanò, S. Fulle, G. Della Torre, I. Giambanco, M.C. Aisa, R. Donato, P. Calissano* 177

An example of substrate channeling between co-immobilized enzymes: Coupled activity of myosin ATPase and creatine kinase bound to frog heart myofilaments (FEB 06533) *M. Arrio-Dupont* 181

Different tachykinin receptor subtypes are coupled to the phosphoinositide or cyclic AMP signal transduction pathways in rat submandibular cells (FEB 06532) *A. Laniyonu, E. Sliwinski-Lis, N. Fleming* 186

Phorbol ester-responsive H-*ras*1 gene promoter contains multiple TPA-inducible/AP-1-binding consensus sequence elements (FEB 06531) *D.A. Spandidos, R.A.B. Nichols, N.M. Wilkie, A. Pintzas* 191

Chicken liver basic fatty acid-binding protein (p*I*=9.0): Purification, crystallization and preliminary X-ray data (FEB 06519) *G. Scapin, P. Spadon, L. Pengo, M. Mammi, G. Zanotti, H.L. Monaco* 196

Direct $^{19}F$ NMR observation of the conformational selection of optically active rotamers of the antifolate compound fluoronitropyrimethamine bound to the enzyme dihydrofolate reductase (FEB 06528) *S.J.B. Tendler, R.J. Griffin, B. Birdsall, M.F.G. Stevens, G.C.K. Roberts, J. Feeney* 201

Mobile sequences in the pyruvate dehydrogenase complex, the $E_2$ component, the catalytic domain and the 2-oxoglutarate dehydrogenase complex of *Azotobacter vinelandii*, as detected by 600 MHz $^1H$-NMR spectroscopy (FEB 06524) *R. Hanemaaijer, J. Vervoort, A.H. Westphal, A. de Kok, C. Veeger* 205

Hydrogen exchange from the transbilayer hydrophobic peptide of glycophorin reconstituted in lipid bilayers (FEB 06525) *M. Sami, C. Dempsey* 211

Synthesis of acylated SOD derivatives which bind to the biomembrane lipid surface and dismutate extracellular superoxide radicals (FEB 06520) *Y. Ando, M. Inoue, T. Utsumi, Y. Morino, S. Araki* 216

Phorbol ester stimulates the synthesis of sphingomyelin in NIH 3T3 cells: A diminished response in cells transformed with human A-*raf* carrying retrovirus (FEB 06530) *Z. Kiss, U.R. Rapp, W.B. Anderson* 221

Author Index 227

Table of Contents 230

Notes to Authors 233